ROSCO®

VisionSystems

Smart-Vision™ 4.3" Rearview Mirror/Monitor Combo Backup Camera System

INSTALLATION/USER'S MANUAL

STSK453X Series

90-21 144th Place
Jamaica, NY 11435

1.800.227.2095
www.roscovision.com

STSK4530 Component List

Qty	P/N	Qty.
1	STSC130W (White) STSC130R (Chrome) STSC130B (Black) *system comes with 1 camera with a choice of 3 colors:	BACK UP CAMERA, INCLUDES: P/N STSC100X HIGH MOUNT, LOOK DOWN CAMERA WITH HARDWARE P/N STSH333 CAMERA POWER & SPLITTER HARNESS
1	STSM230	BACK UP CAMERA MIRROR/MONITOR INCLUDES: P/N STSM1000 4.3" COLOR MIRROR MONITOR P/N STSW1000 WINDSHIELD MOUNT #1 FOR MIRROR MONITOR P/N STSH4530 MONITOR POWER HARNESS
1	STSH330	BACK UP CAMERA EXTENSION HARNESS, 25FT, ROSCO, P/N STSH330

Notes:
- Please read this manual carefully before using the product.
- This system is intended as an aid to safe reverse operation. Drivers must always use extreme caution when operating a vehicle.
- Specifications subject to change without prior notice.

Warning:
- To prevent electrical shock, DO NOT OPEN MONITOR CASE.
- Avoid exposing monitor to water, rain, moisture etc.
- Do not disassemble the camera. This voids the warranty. Disassembling the camera will compromise the waterproof seal.

STSK4531 Component List

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1	STSC130W (White) STSC130R (Chrome) STSC130B (Black) *system comes with 1 camera with a choice of 3 colors:	BACK UP CAMERA, INCLUDES: P/N STSC100X HIGH MOUNT, LOOK DOWN CAMERA WITH HARDWARE P/N STSH333 CAMERA POWER & SPLITTER HARNESS
1	STSM231	BACK UP CAMERA MIRROR/MONITOR INCLUDES: P/N STSM1001 4.3" CLIP ON COLOR MIRROR MONITOR P/N STSH4530 MONITOR POWER HARNESS
1	STSH330	BACK UP CAMERA EXTENSION HARNESS, 25FT, ROSCO, P/N STSH330

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Smart-Vision™ 4.3" Rearview Mirror/Monitor Combo Backup Camera System

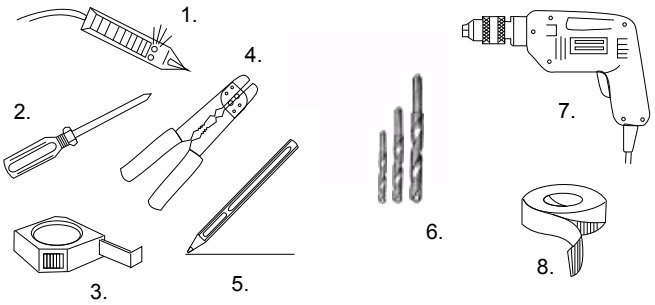
Rosco Vision Systems introduces a revolutionary new backup camera system for small to medium vehicles. Smart-Vision™ utilizes an interior rearview mirror to display a 4.3" LCD monitor when the vehicle shifts into reverse. This monitor allows the driver to see behind the vehicle for added convenience and safety.

The camera has an advanced CMOS lens sensor able to process excellent images under dark and light conditions. The camera has a 170° diagonal field of vision giving superb coverage behind the vehicle and complies with the latest NHTSA 49 CFR Parts 571 and 585 (RIN 2127-AK43), when installed properly.

General Technical Specifications:

Power Supply:	12VDC
Power Consumption:	~3 Watt
Current Draw:	~250 mA
Video Input:	1 Vp-p@75 impedance
Monitor Dimensions:	11"W x 3"H x 1.5"D

Installation Tools:



1. Wire Tester
2. Phillips Screwdriver
3. Tape Measure
4. Wire Stripper
5. Pencil
6. Drill Bits
7. Drill
8. Tape
9. Wire Ties (Not Shown)

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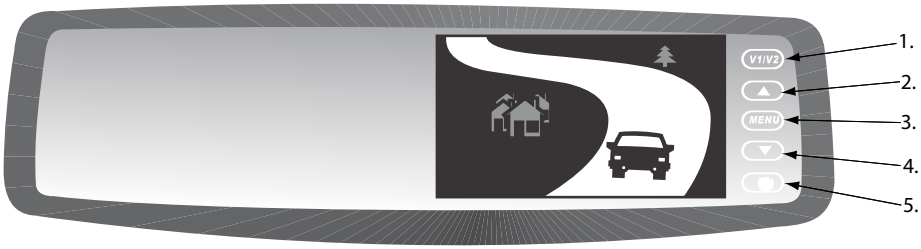
How To Operate Display



How To Operate Display:

1. V1/V2 - Not Applicable.
2. "Up" - Menu selection control.
3. Menu - Switches to setup menu.
4. "Down" - Menu selection control.
5. Power - Switches monitor off. Typically not used

How To Set Your Monitor:

On-screen menu commands may be selected pressing the MENU button while the mirror/monitor is on:

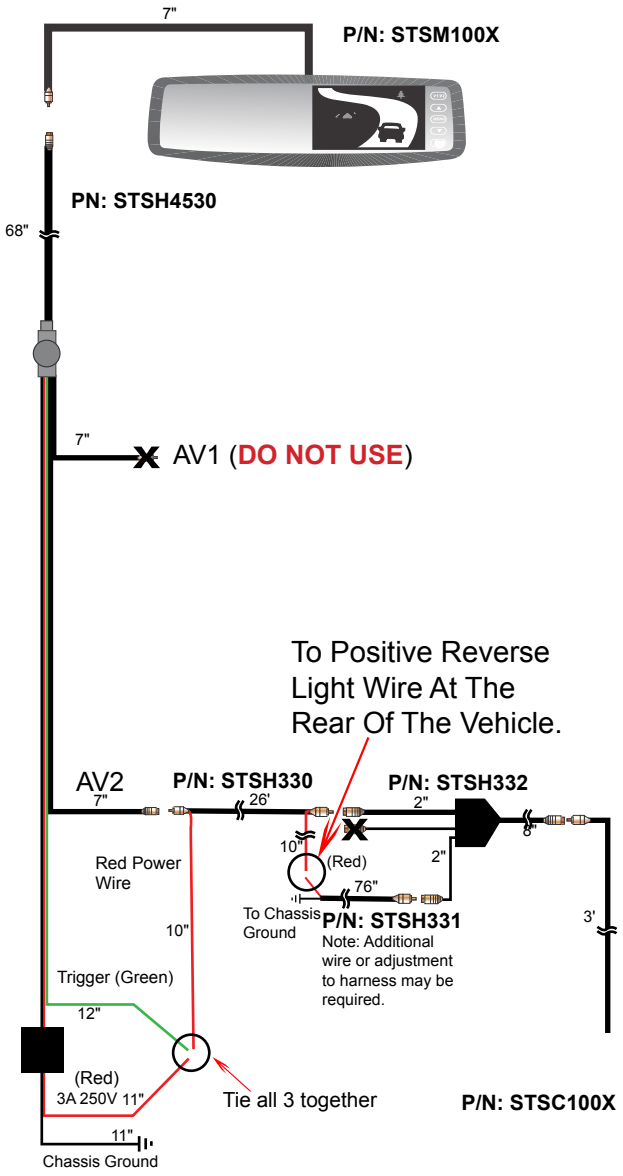
Brightness
Contrast
Saturation
Hue
Sharpness
4:3/16:9
Reset

Monitor Technical Specifications:

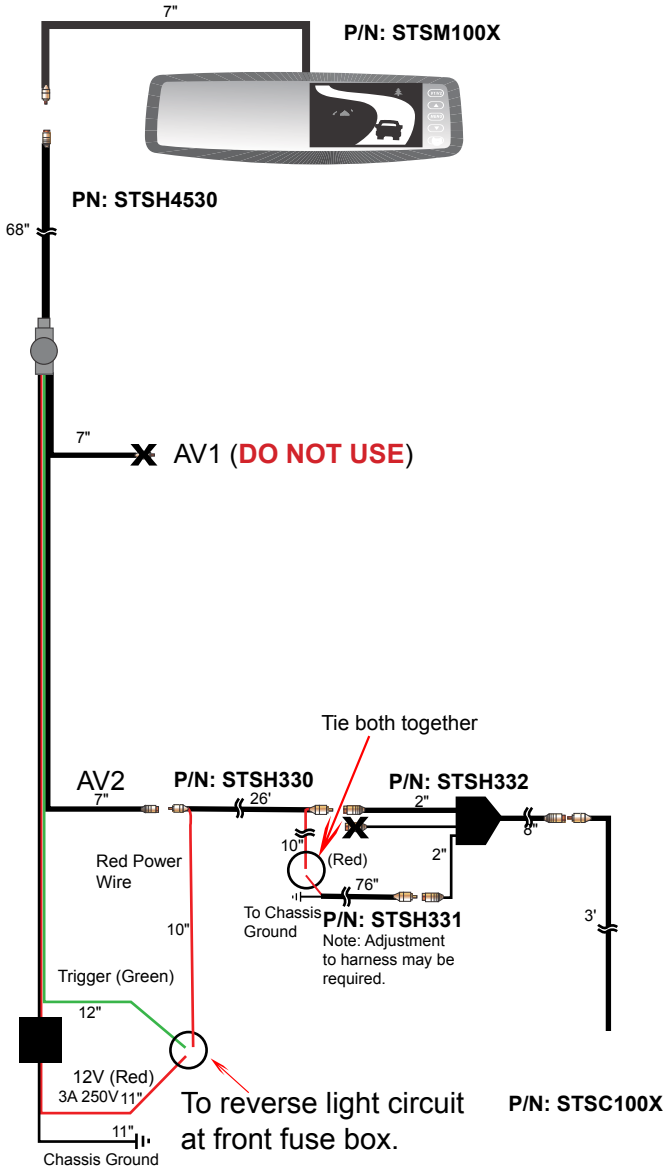
Screen:	4.3" TFT Color LCD
Brightness:	350cd/m^2
Contrast ratio:	300:1
Resolution:	480 x 272
Current Draw:	Max 120mA
Video format:	NTSC/PAL
Display format:	4 : 3 or 16 : 9
Nomenclature:	12V
Working Temp. °F(°C):	-5° to 158° (-20° to 70°)

IMPORTANT: The Rearview Mirror/ Monitor is not intended to be used for prolonged periods of time. Therefore the monitor stays off until triggered by reverse circuit.

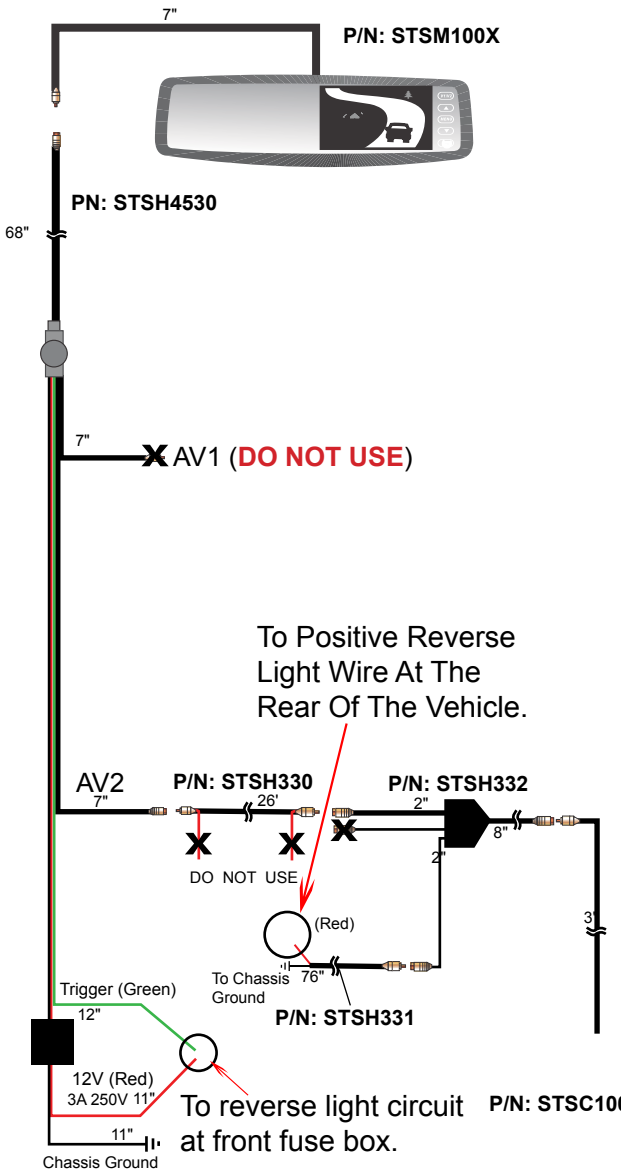
Option #1: Power Provided From Back of Vehicle (Most Common)



Option #2: Power Provided From Front of Vehicle



Option #3: Power Provided From Front and Back of Vehicle (Least Common)



Wiring Diagram

Color Camera

*STSC130 Color Camera is also available in chrome (Not Shown)

Camera Technical Specifications:

Signal System:	NTSC
Sync System:	Internal
Horizontal Resolution:	420TVL
Minimum Illumination:	0.2Lux
Diagonal Angle:	170°
Video Output:	RCA, 1.0Vp-p, 75ohm
Waterproof Grade:	IP67
Current Draw:	Max. 90mA
Nominal Voltage:	DC12V
Working Temp. °F(°C):	-22° to 158° (-30° to 70°)

Features and Benefits:

- Superb Night Vision
- 170° Diagonal field of vision
- Easy installation

Rearview Mirror Installation

For standard mirror monitor

1. Attach windshield mounting bracket to the back of STSM230 mirror/ monitor. Be certain that the monitor is in the upright position when attaching the mounting bracket. (Figure 1)

2. Remove old rearview mirror from factory mirror-mount tab.

3. Mount rearview mirror/monitor securely to mounting tab by tightening screw. (Figure 2)

4. Route the 8-pin connector end of the power harness to the location of mirror/monitor (preferably through the headliner and the vehicles A or B pillars).

5. Connect the power harness with the mating 8-pin receptacle end coming out of the mirror/monitor.

   IMPORTANT: Please be certain to match both guiding lines on each connector for a proper connection.

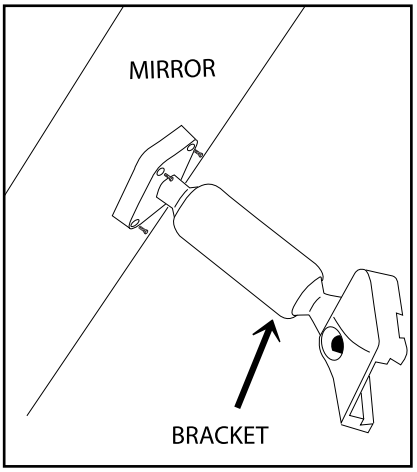


Figure. 1

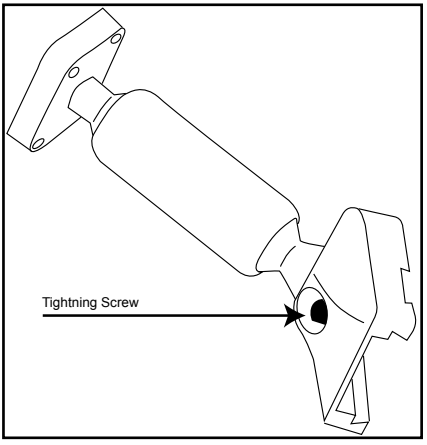


Figure. 2

For clip on mirror monitor

1. Expand STSM231 mirror monitor clamps and place over existing rear view mirror

Camera Installation

1. Select a high and centered location at the rear of the vehicle to mount the STSC130 camera.

   IMPORTANT: When selecting this location it is highly recommended that the image transmitted by the camera show the rear bumper and area behind the vehicle.

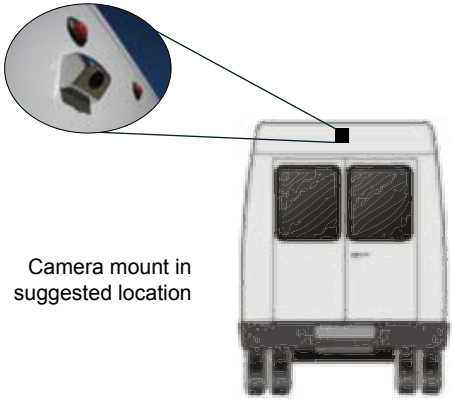
2. We do not recommend mounting the camera near the lower area of the vehicle (ex. bumper). This reduces the view of the camera and increases the chance of physical damage to the camera.

3. Once the location for the camera is chosen, drill the mounting hole to the inside of the vehicle using a 5/16 drill bit. Be sure to clear any obstacles before drilling hole.

4. Attach the provided 3M double sided tape to the back of the camera.

5. Insert camera wire through newly drilled hole and mount securely in place.

6. To finalize the camera installation, hand tighten the provided 5/16 nut to the back of the camera on the inside of the vehicle.



Mount camera assembly high. (Centered)

Figure. 1

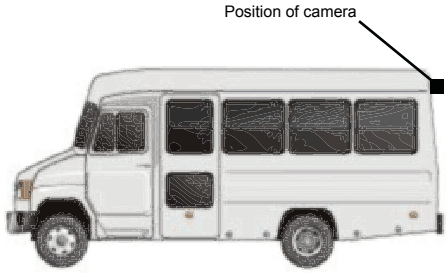
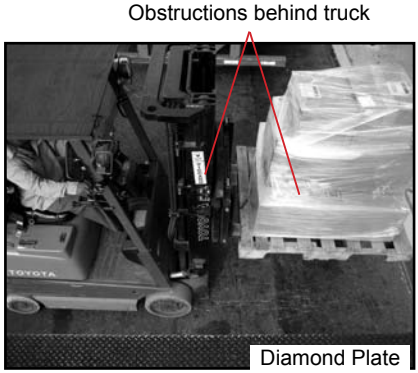


Figure. 2



Typical monitor image of view from properly installed camera

Figure. 3

Testing

How to Test:

1. Apply the parking brakes.

2. Turn Ignition on. (DO NOT TURN ON VEHICLE)

3. Shift into reverse gear.

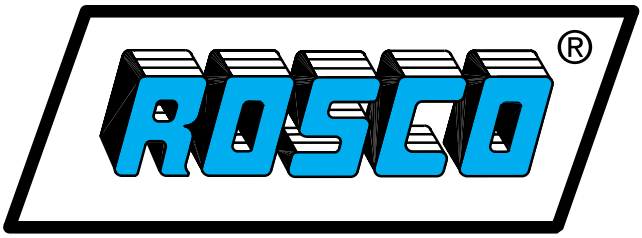
4. Image should appear on the monitor.

Trouble Shooting:

Problem	Solution
No power to monitor while reversing.	Check power and reverse trigger connections.
"No Signal" appears while reversing.	1. Press AV1/AV2 button to change video inputs. 2. Check video input connections. 3. Check camera power connections.
Video image is not sharp.	Check camera lens for debris.

Maintenance:

Always keep camera clear from dirt, snow, and mud. Clean camera with a soft moist cloth.



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